

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1994:613038 CAPLUS

DN 121:213038

TI Crosslinkable derivatives of **collagen**, process for their preparation, and their use in the preparation of biomaterials for prostheses or other medical articles

IN Gagnieu, Christian

PA Flamel Technologies, S. A., Fr.

SO Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 575273	A1	19931222	EP 1993-420255	19930617
	EP 575273	B1	19971203		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT,				

SE

	FR 2692582	A1	19931224	FR 1992-7692	19920618
	FR 2692582	B1	19980918		
	US 5412076	A	19950502	US 1993-77605	19930617
	AT 160798	E	19971215	AT 1993-420255	19930617
	ES 2113511	T3	19980501	ES 1993-420255	19930617
	JP 06080935	A2	19940322	JP 1993-148108	19930618

PRAI FR 1992-7692 19920618

AB Crosslinkable **collagens** are disclosed which are sol. in water and/or aprotic polar org. solvents; the **collagens** have a free or substituted thiol function on residues of cysteine or derivs. thereof (homocysteine, cysteamine, etc.), the residues being bonded to **collagen** at least in part via a spacer compd (e.g. a dicarboxylic acid). Prepn. of the modified **collagens** is also provided. The modified **collagens** are useful for biomaterials for medical articles (prostheses, implants, etc.). Thus, a cysteaminy succinyl **collagen** was prepd. using bovine atelocollagen types I and III and disuccinylcystamine. The product was used in the formulation of a gel

and

of a film. Ex vivo evaluation of tissue adhesion (with rabbit muscle tissue) using a product of the invention is also described.

IT 1069-29-0DP, Cystine dimethyl ester, reaction products with succinyl atelocollagen

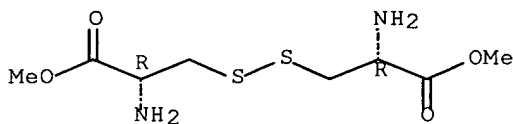
RL: PREP (Preparation)

(prepn. of, for crosslinkable **collagen** thiol deriv. for biomaterial for prosthetic or other medical article)

RN 1069-29-0 CAPLUS

CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



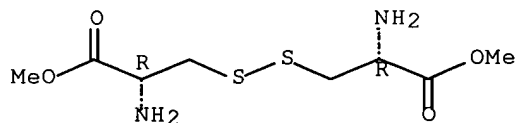
IT 1069-29-0, Cystine dimethyl ester

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in crosslinkable **collagen** thiol deriv. prepn.
for biomaterial for prosthetic or other medical article)

RN 1069-29-0 CAPLUS

CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 16:42:42 ON 12 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:42:49 ON 12 DEC 2003

L1 STRUCTURE UPLOADED
L2 96 S L1 FUL

FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003

L3 293 S L2
L4 49 S L3 AND (ASPART? OR GLUT?)
L5 1 S L4 AND COLLAGEN?

=> s l3 and collagen?

 90369 COLLAGEN?
L6 3 L3 AND COLLAGEN?

=> s l6 not l5

L7 2 L6 NOT L5

=> d bib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:61212 CAPLUS

DN 130:111488

TI Improved regenerated **collagen** fiber and method of manufacturing the same

IN Sakashita, Shinichi; Tsugawa, Mamoru; Goto, Masaoki; Matsumura, Kunihiro;

Hirokawa, Norio

PA Kaneka Corporation, Japan

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 890663	A2	19990113	EP 1998-112889	19980710
	EP 890663	A3	19990714		
	EP 890663	B1	20021113		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

	JP 11323727	A2	19991126	JP 1998-116819	19980427
	CN 1207422	A	19990210	CN 1998-117804	19980709
	CN 1100165	B	20030129		
	US 6160096	A	20001212	US 1998-113423	19980710
PRAI	JP 1997-186794	A	19970711		
	JP 1998-61378	A	19980312		
	JP 1998-116819	A	19980427		

OS MARPAT 130:111488

AB The title fibers exhibit draping, luster, and feel close to those of a natural protein fiber such as a human hair and capable of application of a

permanent wave treatment, wherein the amino groups and/or carboxyl groups

of the regenerated **collagen** are chem. modified to introduce mercapto groups and/or disulfide linkages. Thus, regenerated **collagen** fibers were treated with a soln. contg. cystamine dihydrochloride and 1-ethyl-3-(3'-dimethylaminopropyl)carbodiimide HCl.

IT **32854-09-4DP**, L-Cystine dimethyl ester dihydrochloride, reaction products with regenerated **collagen** fibers

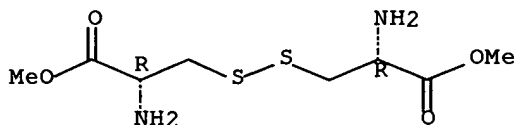
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(modified regenerated **collagen** fibers for permanent wave treatment with retention of waved shapes)

RN 32854-09-4 CAPLUS

CN L-Cystine, dimethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 2 HCl

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:774579 CAPLUS

DN 123:208920

TI Thiol-containing biomaterials for medical and pharmaceutical use

IN Constancis, Alain; Soula, Gerard

PA Flamel Technologies, Fr.

SO Fr. Demande, 28 pp.

CODEN: FRXXBL

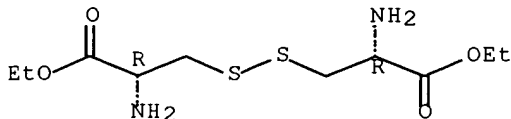
DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2707992	A1	19950127	FR 1993-9198	19930721
	FR 2707992	B1	19951013		
	WO 9503272	A1	19950202	WO 1994-FR914	19940721
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 710226	A1	19960508	EP 1994-922288	19940721
	EP 710226	B1	19981014		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
SE	JP 09503490	T2	19970408	JP 1994-504980	19940721
	AT 172191	E	19981015	AT 1994-922288	19940721
	US 5646239	A	19970708	US 1996-578539	19960306
PRAI	FR 1993-9198		19930721		
	WO 1994-FR914		19940721		
OS	MARPAT 123:208920				
AB	Thiol-contg. biomaterials for medical and pharmaceutical use are prepd. from condensation of a dicarboxylic acid with a S-contg. amino acid or its derivs. (Markush structure given). The compns. are used for prepn. of sutures, prosthetics, adhesives and controlled-release prepn. Thus, 3 g [CH(CH ₂) ₂ CONHCH(COOH)CH ₂ S:SCH ₂ CH ₂ (COOH)NH]n (prepn. given) and 2.87 g dithiothreitol was dissolved in 70 mL water under N, pH = 8.5, and stirred for 3 h to obtain [SHCH ₂ CH(COOH)NHCO(CH ₂) ₂ CONHCH(COOH)CH ₂ SH]n.				
IT	583-89-1P 22888-38-6P				
	RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
	(thiol-contg. biomaterials for medical and pharmaceutical use)				
RN	583-89-1 CAPLUS				
CN	L-Cystine, diethyl ester (9CI) (CA INDEX NAME)				

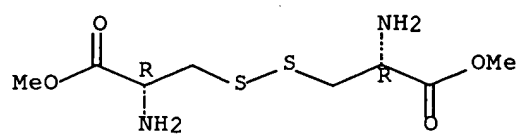
Absolute stereochemistry.



RN 22888-38-6 CAPLUS

CN L-Cystine, dimethyl ester, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●x HCl

=> d his

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L1 STRUCTURE UPLOADED

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L3 293 S L2

L4 49 S L3 AND (ASPART? OR GLUT?)

L5 1 S L4 AND COLLAGEN?

L6 3 S L3 AND COLLAGEN?

L7 2 S L6 NOT L5

=> s l3 and graft?

106892 GRAFT?

L8 2 L3 AND GRAFT?

=> s l8 not l7

L9 2 L8 NOT L7

=> d bib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L9 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2001:636468 CAPLUS
 DN 135:252520
 TI Dimerizable Cationic Detergents with a Low cmc Condense Plasmid DNA into Nanometric Particles and Transfect Cells in Culture
 AU Dauty, Emmanuel; Remy, Jean-Serge; Blessing, Thomas; Behr, Jean-Paul
 CS Laboratoire de Chimie Genetique, CNRS/Universite Louis Pasteur de Strasbourg Faculte de Pharmacie, Illkirch, 67401, Fr.
 SO Journal of the American Chemical Society (2001), 123(38), 9227-9234
 CODEN: JACSAT; ISSN: 0002-7863
 PB American Chemical Society
 DT Journal
 LA English
 AB The size of condensed DNA particles is a key determinant for in vivo diffusion and gene delivery to cells. Gene mols. can be individually compacted by cationic thiol detergents into nanometric particles that are stabilized by oxidative conversion of the detergent into a gemini lipid. To reach the other goal, gene delivery, a series of cationic thiol detergents with various chain lengths (C12-C16) and headgroups (ornithine or spermine) was prepd., using a versatile polymer-supported synthetic strategy. Crit. micelle concns. and thiol oxidn. rates of the detergents were measured. The formation and stability of complexes formed with plasmid DNA, as well as the size, .xi.-potential, morphol., and transfection efficiency of the particles were investigated. Using the tetradecane/ornithine detergent, a soln. of 5.5 Kpb plasmid DNA mols. was converted into a homogeneous population of 35 nm particles. The same detergent, once oxidized, exhibited a typical lipid phase internal structure and was capable of effective cell transfection. The particle size did not increase with time. Surprisingly, the gel electrophoretic mobility of the DNA complexes was found to be higher than that of plasmid DNA itself. Favorable in vivo diffusion and intracellular trafficking properties may thus be expected for these complexes.

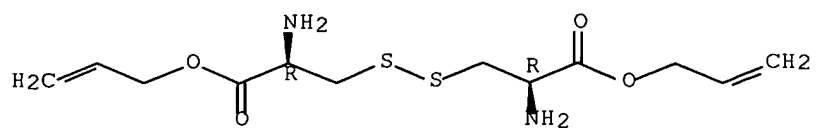
IT 142601-71-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (dimerizable cationic detergents with a low cmc condense plasmid DNA into nanometric particles and transfect cells in culture)
 RN 142601-71-6 CAPLUS
 CN L-Cystine, di-2-propenyl ester, bis(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

CRN 142601-70-5

CMF C12 H20 N2 O4 S2

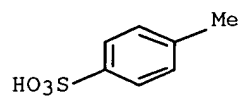
Absolute stereochemistry.



CM 2

CRN 104-15-4

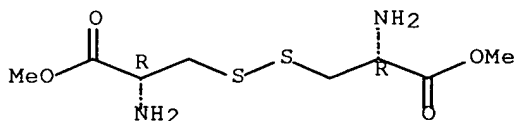
CMF C7 H8 O3 S



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1994:442666 CAPLUS
 DN 121:42666
 TI Synthesis of amino-acid segmented polyetherurethane and its film
 modified
 by heparin
 AU Yang, Fuliang; Han, Yongxin; Feng, Xinde
 CS Dep. Chem., Peking Univ., Beijing, Peop. Rep. China
 SO Beijing Daxue Xuebao, Ziran Kexueban (1993), 29(6), 695-8
 CODEN: PCTHAP; ISSN: 0479-8023
 DT Journal
 LA Chinese
 AB SPEU-I and II were novel antithrombogenic polyetherurethane materials.
 Polyetherurethane (SPEU) was segmented with L-Lysine Me ester (L-Lys-
 OMe)
 or L-Cystine di-Me ester (L-Cys-diOMe) as extenders. Heparin is
 covalently bounded on the SPEU film surface which can improve the
 antithrombosis of film. The exptl. results showed that both SPEU-I and
 SPEU-II products with the yields above 90%. Their IR, dynamic mech.
 properties and anticoagulant activities were measured. Both SPEU-I and
 SPEU-II have good blood compatibility and their morphol. research
 results
 by the SEM photographs of the **grafted** films. After
graft copolymd. with heparin, the SPEU films become opaque and the
 scanning electron micrographs clearly showed surface **graft**
 copolymn. of the films.
 IT 1069-29-0P, L-Cystine dimethyl ester
 RL: BAC (Biological activity or effector, except adverse); BSU
 (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
 use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. and anticoagulant activity of)
 RN 1069-29-0 CAPLUS
 CN L-Cystine, dimethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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L6 3 S L3 AND COLLAGEN?
L7 2 S L6 NOT L5
L8 2 S L3 AND GRAFT?
L9 2 S L8 NOT L7

=> s l3 and cross link?

426098 CROSS
13646 CROSSES
437876 CROSS
 (CROSS OR CROSSES)
375589 LINK?
38755 CROSS LINK?
 (CROSS(W) LINK?)

L10 1 L3 AND CROSS LINK?

=> d

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:493084 CAPLUS
DN 111:93084
TI p-Nitrophenyl 3-diazopyruvate and diazopyruvamides, a new family of
photoactivatable **cross-linking** bioprobes
AU Goodfellow, Val S.; Settineri, Marc; Lawton, Richard G.
CS Dep. Chem., Univ. Michigan, Ann Arbor, MI, 48109, USA
SO Biochemistry (1989), 28(15), 6346-60
CODEN: BICHAW; ISSN: 0006-2960
DT Journal
LA English

=> d bib abs hitstr 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1989:493084 CAPLUS

DN 111:93084

TI p-Nitrophenyl 3-diazopyruvate and diazopyruvamides, a new family of photoactivatable **cross-linking** bioprobes

AU Goodfellow, Val S.; Settineri, Marc; Lawton, Richard G.

CS Dep. Chem., Univ. Michigan, Ann Arbor, MI, 48109, USA

SO Biochemistry (1989), 28(15), 6346-60

CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

AB p-Nitrophenyl 3-diazopyruvate (DAPpNP) was developed as a heterobifunctional crosslinking agent for synthesis of photoaffinity probes and photoactivatable crosslinking agents that are nucleophile specific. p-Nitrophenyl chloroglycoylate is formed in high yield from oxalyl chloride and p-nitrophenol. Subsequent reaction with diazomethane

produces DAPpNP in 50-60% overall yield. DAPpNP acylates primary and secondary amines to form 3-diazopyruvamides in high yields.

3-Diazopyruvamide derivs. were formed from a wide variety of amines including arom. amines, amino acids, and peptides. 3-Diazopyruvamides undergo photolysis and Wolff rearrangement at 300 nm to produce a ketene amide, which efficiently acylates nucleophilic species to form malonic acid amide derivs. A family of photoactivatable 3-diazopyruvamide crosslinking agents was synthesized from cystamine. These reagents were caused to react with rabbit muscle aldolase to form mainly dimeric crosslinked species.

IT 32854-09-4, L-Cystine dimethyl ester dihydrochloride

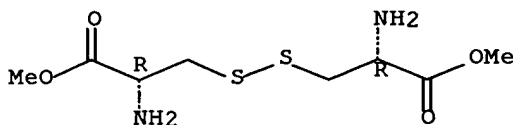
RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with diazopyruvoyl nitrophenyl ester)

RN 32854-09-4 CAPLUS

CN L-Cystine, dimethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



⊗2 HCl

=> d his

(FILE 'HOME' ENTERED AT 16:42:42 ON 12 DEC 2003)

FILE 'REGISTRY' ENTERED AT 16:42:49 ON 12 DEC 2003

L1 STRUCTURE UPLOADED
L2 96 S L1 FUL

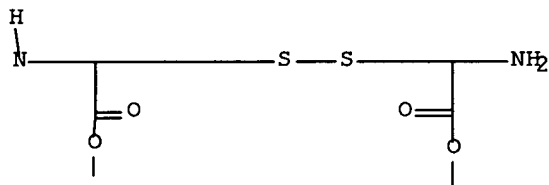
FILE 'CAPLUS' ENTERED AT 16:43:08 ON 12 DEC 2003

L3 293 S L2
L4 49 S L3 AND (ASPART? OR GLUT?)
L5 1 S L4 AND COLLAGEN?
L6 3 S L3 AND COLLAGEN?
L7 2 S L6 NOT L5
L8 2 S L3 AND GRAFT?
L9 2 S L8 NOT L7
L10 1 S L3 AND CROSS LINK?

=> d l1; d his; log y

L1 HAS NO ANSWERS

L1 STR



G1 H

Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 16:42:42 ON 12 DEC 2003)

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COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST

43.61

191.97

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY

TOTAL
SESSION

CA SUBSCRIBER PRICE

-3.91

-3.91

STN INTERNATIONAL LOGOFF AT 16:47:54 ON 12 DEC 2003